## REMARKS/ARGUMENTS

Claims 1-10 are pending in the Application.

In Paragraph 2 on page 2 of the Office Action, claims 1-10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,828,467 of Suzuki in view of U.S. Patent 5,929,936 of Arai, et al. In Paragraph 4 on page 5 of the Office Action, claims 1 and 3 are rejected under 35 U.S.C. § 102(e) as anticipated by Arai, et al. '936. In Paragraph 6 on page 6 of the Office Action, claim 2 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Arai et al. '936 in view of the knowledge generally available to one of ordinary skill in the art. These rejections are respectfully traversed.

As Applicants have previously pointed out, Suzuki '467 shows image processing in which an image is divided into blocks, and data processing is done, block-by-block. The noise which is described in Suzuki is not, however, pulse noise in a radio signal. Suzuki does not disclose or suggest the feature of (1) data interpolation processing on a detected radio signal, and (2) interpolation using an output signal from an interpolation circuit, in the manner of the present invention.

As Applicants have also previously pointed out, Arai et al. '936 shows interpolation processing, but the interpolation is not directed to noise cancellation. Such reference does not describe or even suggest interpolation of a noise portion using a signal output from an interpolation circuit.

Applicants have also previously pointed out, in connection with independent claim 1, that the noise cancel circuit for removing noise components in a detected radio signal as defined therein comprises "an interpolation circuit for performing interpolation processing on said detected radio signal" and wherein "during generation of a pulse noise, a noise portion of said detected radio signal is

interpolated by an output signal from said interpolation circuit". The prior art does not disclose or suggest such features in accordance with the invention.

Unlike the prior Office Action of August 15, 2003 in which most of the claims were rejected as anticipated by Suzuki '467 alone, the present Office Action rejects claims 1-10 as unpatentable over Suzuki '467 in combination with Arai et al. '936. In making such rejection, the Office Action appears to be saying that while Suzuki may relate to image processing and not audio signal processing, that nevertheless the claimed subject matter is obvious in view of the noise cancellation taught by Arai et al. '936. The Office Action states that the type of signal used is not critical to Suzuki, and that criticality resides in the method taught to cancel the noise from the signal. Such position is respectfully traversed by Applicants.

Like Suzuki '467, Arai et al. '936 describes arrangements relating to removal of noise in image signals rather than radio signals. The first sentence of the abstract of Arai et al. '936 states "A noise reducer to which image data obtained by decoding coding data using a DCT coding is supplied (emphasis added)". And beginning at line 59 of col. 1 under the heading Objects and Summary of the Invention, the statement is made "there is provided a noise reducer to which image data obtained by decoding coding data using a DCT coding is supplied, . . . (emphasis added)". In column 3 of the patent, Fig. 1 is described as an example of a video CD player to which the invention can be applied. The Figure is described in terms of a video CD1 being read by an optical pick-up 2. The pick-up 2 picks up a reproduction RF signal which is inputted to an RF amplifier 3 before being applied to a demodulating circuit 4. The references to an RF signal and an RF amplifier correspond to the frequency band and not the nature of the signal. Again, the Arai et al. '936 patent deals with image signals and not radio signals. Thus, the description in the Arai et al. '936 patent continues at line 61 of column 3 thereof

with processing of luminance and chrominance signals, and the generation of three primary color signals R, G, and B.

Because of the substantial differences in the nature of radio signals as opposed to image signals, the attempted combination of Arai et al. '936 with Suzuki '467 would not make the present invention obvious to one skilled in the art. Moreover, the processing of radio signals in accordance with the invention is emphasized, for example, by claim 1 which defines "A noise cancel circuit for removing noise components in a detected radio signal (emphasis added)", which includes an interpolation circuit for performing interpolation processing on said detected radio signal (emphasis added)", wherein "during generation of a pulse noise, a noise portion of said detected radio signal is interpolated by an output signal from said interpolation circuit (emphasis added)".

Thus, claim 1 is submitted to clearly distinguish patentably over the attempted combination of references. Claims 2-10 depend directly or indirectly from claim 1 and contain all of the limitations thereof, so that these claims are also submitted to clearly distinguish patentably over the attempted combination of references.

Similar comments apply to the rejection of claims 1 and 3 as being anticipated by Arai et al. '936 and claim 2 as unpatentable over Arai et al. '936 in view of general knowledge. Again, Arai et al. '936 is of limited relevance because of it deals with image signals. Consequently, such reference does not anticipate or otherwise render unpatentable the claims according to the present invention which are specific in terms of their processing of radio signals.

In conclusion, claims 1-10 are submitted to clearly distinguish patentably over the prior art for the reasons discussed above. Therefore, reconsideration and allowance are respectfully requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (213) 337-6700 to discuss the steps necessary for placing the application in condition for allowance.

If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-1314.

Respectfully submitted,
HOGAN & HARTSON L.L.P.

Date: June 25, 2004

By: _____
Anthony J. Orler
Registration No. 41,232
Attorney for Applicant(s)

500 South Grand Avenue, Suite 1900
Los Angeles, California 90071
Phone: 213-337-6700
Fax: 213-337-6701